

## WHAT IS CLAIMED IS:

1. A method for trading a commodity, comprising:

receiving, in encoded form via a computer network, a plurality of bids and a plurality of offers pertaining to a common commodity;

displaying said bids and offers on a computer monitor;

generating a trading offer including a trading rate or price per unit of said commodity, and a number of units of said commodity;

automatically calculating a total stop amount for said trading offer;

automatically comparing said total stop amount with an available amount in a client or trader account; and

transmitting a digital signal encoding said trading offer to over said computer network for distribution to multiple traders.

2. The method defined in claim 1 wherein the calculating of said total stop amount includes computing a stop amount and a slippage amount.

3. The method defined in claim 2 wherein the calculating of said slippage amount includes automatically multiplying a default slip per unit of said commodity times the identified number of units of said commodity in said trading offer.

4. The method defined in claim 1, further comprising automatically allocating or reserving said total stop amount from the available amount in said client or trader account.

5. The method defined in claim 4, further comprising canceling at least a portion of said trading offer and automatically returning at least a portion of the allocated or reserved amount to said client or trader account upon such cancellation.

6. The method defined in claim 1 wherein said digital signal is transmitted upon and only upon a determination that said total stop amount is less than the available amount in said client or trader account.

7. The method defined in claim 1 wherein the generating of said trading offer and the comparing of said total stop amount with the available amount in said client or trader account are performed by a client or trader computer connected to said computer network.

8. The method defined in claim 1 wherein the transmitting of said digital signal includes directing said digital signal to a server computer connected to said computer network, said server computer distributing said trading offer to said traders.

9. The method defined in claim 1 wherein the calculating of said total stop amount includes automatically multiplying a default stop per unit of said commodity times the identified number of units of said commodity in said trading offer.

10. The method defined in claim 1 wherein said trading offer additionally includes identification of a stop amount per unit of said commodity, the calculating of said total stop amount includes automatically multiplying said stop amount per unit of said commodity times

the identified number of units of said commodity in said trading offer.

11. The method defined in claim 1, further comprising:

displaying on said monitor a prompt for entry of a stop value; and

determining that a respective stop value has been selected for said trading offer,

forwarding, via said computer network, said respective stop value to a server computer together with said trading offer.

12. The method defined in claim 1, further comprising:

displaying on said monitor a prompt for entry of a limit value; and

determining that a respective limit value has been selected for said trading offer,

forwarding, via said computer network, said respective limit value to a server computer together with said trading offer.

13. The method defined in claim 1, further comprising:

displaying on said monitor a prompt for entry of a time period for which said trading offer remains valid and capable of being accepted;

determining that a respective time period has been selected for said trading offer;

determining when said time period is terminated; and

canceling said trading offer upon termination of said time period.

14. The method defined in claim 1, further comprising:

displaying said bids in a first monotonic sequence on a computer monitor; and

simultaneously displaying said offers in a second monotonic sequence on said computer monitor.


15. The method defined in claim 1, further comprising displaying, on said computer monitor, total units of said commodity for trading at prices identified in said bids and said offers.

16. A method for trading a commodity, comprising:

- receiving, via a computer network, digital signals together encoding a plurality of bids and a plurality of offers pertaining to a common commodity;
- displaying said bids in a first monotonic sequence on a computer monitor;
- simultaneously displaying said offers in a second monotonic sequence on said computer monitor;
- monitoring a computer input device; and
- upon detecting a signal from said input device of a predetermined type, transmitting an order signal over said computer network to a server computer, said order signal encoding a trading order for requesting a transaction on one of said bids and said offers.

17. The method defined in claim 16, further comprising:

- displaying on said monitor a plurality of prompts for particulars of a trading offer, said prompts including prompts to enter a price per unit of said commodity and a total number of units of said commodity;
- determining entry via said input device of a trading offer including at least a price per

 commodity unit and a total number of commodity units; and

forwarding said trading offer over said computer network to multiple other traders on said computer network.

18. The method defined in claim 17, further comprising:

displaying on said monitor a prompt for entry of a stop value; and

determining that said trading offer includes a respective stop value,

the forwarding said trading offer including transmission of said respective stop value to said server computer.

19. The method defined in claim 17, further comprising:

displaying on said monitor a prompt for entry of a limit value; and

determining that said trading offer includes a respective limit value,

the forwarding said trading offer including transmission of said respective limit value to said server computer.

20. The method defined in claim 17, further comprising:

displaying on said monitor a prompt for entry of a time period for which said trading offer remains valid and capable of being accepted;

determining that said trading offer includes a respective time period;

determining when said time period is terminated; and

canceling said trading offer upon termination of said time period.

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21. The method defined in claim 16 wherein said computer network is a global computer network, further comprising downloading from said computer network a program enabling and controlling the displaying of said bids and said offers on said computer monitor in response to said digital signals.

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22. A method for use in trading a commodity, comprising:

displaying, on a computer monitor connected to a computer in turn connected to a computer network, a plurality of prompts for particulars of a trading offer, said prompts including prompt to enter a price per unit of said commodity and a total number of units of said commodity;

determining entry via said input device of a trading offer including at least a price per commodity unit and a total number of commodity units; and

forwarding said trading offer to a server computer over said computer network for relay to other traders on said computer network.

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23. The method defined in claim 22, further comprising:

displaying on said monitor a prompt for entry of a stop value; and

determining that said trading offer includes a respective stop value,

the forwarding said trading offer including transmission of said respective stop value to said server computer.

24. The method defined in claim 22, further comprising:

displaying on said monitor a prompt for entry of a limit value; and

determining that said trading offer includes a respective limit value,  
the forwarding said trading offer including transmission of said respective limit value  
to said server computer.

25. The method defined in claim 22, further comprising:

displaying on said monitor a prompt for entry of a time period for which said trading  
offer remains valid and capable of being accepted;

determining that said trading offer includes a respective time period;

determining when said time period is terminated; and

canceling said trading offer upon termination of said time period.

26. A general purpose digital computer connected to a monitor and a command input  
device and modified by programming to comprise:

a register storing a plurality of bids and a plurality of offers pertaining to trading of a  
common commodity;

an update module operatively tied to said register for updating contents thereof;

a communication component operatively connected to a computer network and to said  
update module for receiving, from said computer network, data to be temporarily stored in  
said register and for providing said data to said update module;

a display control operatively connected to said register for displaying said bids and  
said offers in a predetermined format on said monitor;

a command recognition circuit operatively connected to said command input device  
for receiving a trading offer from same, said command recognition circuit being operatively

linked to said display control, whereby said trading offer displayed in sensible form on said monitor; and

command relay circuitry operatively connected to said command recognition circuit and to said computer network, whereby said trading offer is transmitted over said computer network to a server computer.

27. The computer defined in claim 26, further comprising:

a stop computation circuit, operatively connected to said command recognition circuit, for automatically computing a total stop amount for said trading offer,

a memory storing an amount in a client account of the client; and

comparison circuitry operatively connected to said stop computation circuit and said memory for comparing said total stop amount with the amount in said client account, said command relay circuitry being operatively connected to said comparison circuitry for transmitting said trading offer over said computer network to said server computer only upon detecting that said total stop amount is less than or equal to the amount in said memory.

28. The computer defined in claim 27 wherein said stop computation circuit includes:

an additional register storing a default stop per unit of said commodity; and

a multiplier connected to said additional register and to said command recognition circuit for multiplying the identified number of units of said commodity in said trading offer by the default stop stored in said additional register.

29. The computer defined in claim 27 wherein said trading offer additionally includes



identification of a stop amount per unit of said commodity, said stop computation circuit including a multiplier operatively connected to said interface for automatically multiplying said stop amount per unit of said commodity times the identified number of units of said commodity in said trading offer.

30. The computer defined in claim 27 wherein said comparison circuitry includes circuitry for allocating or reserving at least a portion of the amount in said client account in response to said trading offer.

31. The computer defined in claim 26 wherein said format further includes a prompt for entry of a stop value, said command relay circuitry forwarding an entered stop value to said server computer with said trading offer.

32. The computer defined in claim 31 wherein said format further includes a prompt for entry of a limit value, said command relay circuitry forwarding an entered limit value to said server computer with said trading offer.

33. The computer defined in claim 26 wherein said register is a first register, further comprising a second register storing position data including a currency amount, a price per unit of said commodity, and a profit value if a current position is closed at prevailing market rate, said format including an area for listing said position data on said monitor.

34. The computer defined in claim 33, further comprising arithmetic circuitry

operatively connected to said communication component and to said second register for calculating, in response to a transaction confirmation received from said server computer via said computer network, a new position amount and an average price per unit and providing the calculated position amount and the calculated average price to said second register.

35. The computer defined in claim 34, further comprising arithmetic circuitry for computing an amount of allocated capital in response to said transaction confirmation.

36. The computer defined in claim 34 wherein said trading offer additionally includes identification of a stop amount per unit of said commodity, said stop computation circuit including a multiplier operatively connected to said interface for automatically multiplying said stop amount per unit of said commodity times the identified number of units of said commodity in said trading offer.

37. The computer defined in claim 26, further comprising circuitry for allocating or reserving at least a portion of the amount in said client account in response to said trading offer.

38. The computer defined in claim 37, further comprising circuitry for reallocating the amount in said client account in response to a trading order accepting all or part of said trading offer.

39. The computer defined in claim 26 wherein said format includes a menu window,

said window including a first list box and a second list box disposed side by side on said monitor by said display control, said first list box displaying said bids in a first monotonic order, said second list box displaying said offers in a second monotonic order.

40. The computer defined in claim 26 wherein said format includes a text field prompt for entry of said trading offer by a user via said command input device.

41. The computer defined in claim 26 wherein said commodity is a currency.

42. A general purpose digital computer connected to a monitor and a command input device and modified by programming to comprise:

a register storing a plurality of bids and a plurality of offers pertaining to trading of a common commodity;

a display control operatively connected to said register for displaying said bids and said offers in a predetermined format on said monitor;

a command recognition circuit operatively connected to a command input device for receiving a trading offer from same, said command recognition circuit being operatively linked to said display control, whereby said trading offer displayed in sensible form on said monitor;

a stop computation circuit, operatively connected to said command recognition circuit, for automatically computing a total stop amount for said trading offer;

command relay circuitry operatively connected to said command recognition circuit and to said computer network for transmitting said trading offer over said computer network

to a server computer;

a memory storing an amount in a client account of the client; and

comparison circuitry operatively connected to said stop computation circuit and said memory for comparing said total stop amount with the amount in said client account and for triggering transmission of a trading offer upon a meeting of pre-established criteria by said total stop amount and the amount said client account.

43. The computer defined in claim 42 wherein said command relay circuitry is operatively connected to said comparison circuitry for transmitting said trading offer computer network to said server computer only upon detecting by said comparison circuitry that said total stop amount is less than or equal to the amount in said memory.

44. The computer defined in claim 42, further comprising circuitry for allocating or reserving at least a portion of the amount in said client account in response to said trading offer.

45. The computer defined in claim 43, further comprising circuitry for reallocating the amount in said client account in response to a trading order accepting all or part of said trading offer.

46. The computer defined in claim 42 wherein said stop computation circuit includes:  
a register storing a default stop per unit of said commodity; and  
a multiplier operatively connected to said register and to said command recognition

circuit for multiplying the identified number of units of said commodity in said trading offer by the default stop stored in said register.

47. The computer defined in claim 42 wherein said trading offer additionally includes identification of a stop amount per unit of said commodity, said stop computation circuit including a multiplier operatively connected to said command recognition circuit for automatically multiplying said stop amount per unit of said commodity times the identified number of units of said commodity in said trading offer.

48. A general purpose digital server computer connected to a computer network and modified by programming to comprise:

an interface receiving a first digital signal over said computer network from a client's computer, said first digital signal encoding a trading offer including identification of a commodity, a trading rate or price, and a number of units of said commodity;

a stop computation circuit, operatively connected to said interface, automatically computing a total stop amount for said trading offer;

a memory storing an amount in a client account of the client;

comparison circuitry operatively connected to said stop computation circuit and said memory for comparing said total stop amount with the amount in said client account; and

a posting module operatively connected to said interface and said comparison circuitry for transmitting selected details of said trading offer to multiple other clients via said computer network upon receiving a signal from said comparison circuitry that said total stop amount is less than the amount in said client account.

49. The computer defined in claim 48, further comprising a queue maintenance unit operatively tied to said interface for maintaining a list of bids and a list of offers to sell, further comprising:

a comparator operatively connected to said queue maintenance unit for periodically comparing said bids to said offers to sell to determine whether a match has occurred; and

an order execution module operatively coupled to said comparator for (a) modifying accounts of traders who made a matching bid and offer to sell, (b) removing said matching bid and offer to sell from said list of bids and said list of offers to sell, (c) transmitting signals over said computer network to advise all logged-in traders of the match, upon detection by said comparator of the match, and (d) sending specific confirmation to the traders who made the matching bid and offer to sell.

50. The computer defined in claim 49 wherein said queue maintenance unit also maintains a list of stop bids and a list of stop offers, further comprising a position determination module operatively connected to said order execution module and said queue maintenance module for computing, upon detection by said comparator of the matching bid and offer to sell, positions of the traders who made the matching bid and offer to sell and further computing stops associated with the computed positions.

51. The computer defined in claim 48 wherein said stop computation circuit includes:

a register storing a default stop per unit of said commodity; and

a multiplier connected to said register and to said interface for multiplying the identified number of units of said commodity in said trading offer by the default stop stored in

said register.

52. The computer defined in claim 48 wherein said trading offer additionally includes identification of a stop amount per unit of said commodity, said stop computation circuit including a multiplier operatively connected to said interface for automatically multiplying said stop amount per unit of said commodity times the identified number of units of said commodity in said trading offer.

53. The computer defined in claim 48 wherein said computer network is the Internet.

54. The computer defined in claim 48, further comprising an administration module operatively linked to said interface for logging in traders as log-in requests arrive and a message distribution module operatively linked to said interface for supervising the establishment of multiple private chat forums, and distributing messages among logged-in traders according to established chat forums.

55. A commodity trading method comprising:

receiving at a server computer a first digital signal over a computer network from a client's computer, said first digital signal encoding a trading offer including identification of a commodity, a trading rate or price per unit of said commodity, and a number of units of said commodity;

operating said server computer to maintain (i) a first queue of bids ordered by price per commodity unit and times of extending of the respective bids and (ii) a second queue of offers

to sell ordered by price per commodity unit and times of extending of the respective offers to sell;

operating said server computer to determine whether said trading offer matches any entry in said first queue and said second queue; and

upon detection by said server computer of a match between said trading offer and a particular entry in said one of said first queue and said second queue, operating said server computer to (a) modify accounts of traders who made said trading offer and said particular entry, (b) remove said particular entry from said one of said first queue and said second queue, (c) transmit signals over said computer network to advise all logged-in traders of the match, and (d) sending specific confirmation to the traders who made said trading offer and said particular entry.

56. The method defined in claim 55, wherein said trading order is placed in a respective one of said first queue and said second queue upon receiving of said trading order at said server computer, the operating of said server computer to determine whether said trading offer matches any entry in said first queue and said second queue including comparing said bids to said offers to sell to determine whether a match has occurred, said server being operated, upon detection by said server computer of the match between said trading offer and said particular entry, to remove said trading offer and said particular entry from respective ones of said first queue and said second queue.

57. The method defined in claim 55, further comprising operating said server computer to:



log in traders as log-in requests arrive;  
supervise the establishment of multiple private chat forums; and  
distribute messages among logged-in traders according to established chat forums.

58. A method for use in trading a commodity, comprising:

generating a trading offer;

automatically calculating a total stop amount for said trading offer;

automatically comparing said total stop amount with an available amount in a client or

trader account to determine whether said total stop amount and said available amount meet pre-established criteria; and

acting on said trading offer only upon determining that said total stop amount and said available amount meet said pre-established criteria.

59. The method defined in claim 58 wherein the calculating of said total stop amount includes computing a stop amount and a slippage amount.

60. The method defined in claim 59 wherein the calculating of said slippage amount includes automatically multiplying a default slip per unit of said commodity times the identified number of units of said commodity in said trading offer.

61. The method defined in claim 58, further comprising automatically allocating or reserving said total stop amount from said available amount.

62. The method defined in claim 61, further comprising canceling at least a portion of said trading offer and automatically returning at least a portion of the allocated or reserved amount to said client or trader account upon such cancellation.

63. The method defined in claim 58 wherein the acting on said trading offer includes transmitting a digital signal encoding said trading offer to over said computer network for distribution to multiple traders.

64. The method defined in claim 63 wherein said digital signal is transmitted upon and only upon a determination that said total stop amount is less than an available amount in said client or trader account.

65. The method defined in claim 58 wherein the generating of said trading offer and the comparing of said total stop amount said digital signal are performed by a client or trader computer connected to said network.

66. The method defined in claim 58 wherein the transmitting of said digital signal includes directing said digital signal to a server computer connected to said computer network, said server computer distributing said trading offer to said traders.

67. A server computer connected to a computer network for implementing an on-line commodities trading system, comprising:

a queue maintenance unit for maintaining a queue of bids, a queue of offers, a queue of

stop bids, and a queue of stop offers;

a comparator operatively connected to said queue maintenance unit for determining whether a match between a bid and an offer has occurred;

an order execution module operatively coupled to said comparator and said queue maintenance unit in part for modifying at least one of said queue of bids and said queue of offers upon a determination by said comparator that a match has occurred;

a monitoring module operatively connected to said comparator and said queue maintenance unit for monitoring said stop bids and said stop offers to relation to said match to determine whether any of said stop bids and said stop offers should be executed; and

a stop execution module operatively coupled to said monitoring module and to said queue maintenance unit for executing one of said stop bids and said stop offers and modifying a respective one of said queue of stop bids and said queue of stop offers upon execution of said one of said stop bids and said stop orders.

68. The server computer defined in claim 67 wherein said order execution module includes means for (a) modifying accounts of traders who made a matching bid and offer to sell, (b) removing said matching bid and offer to sell from said queue of bids and said queue of offers to sell, (c) transmitting signals over said computer network to advise all logged-in traders of the match, upon detection by said comparator of the match, and (d) sending specific confirmation to the traders who made the matching bid and offer to sell.

69. The server computer defined in claim 68, further comprising a position determination module operatively connected to said order execution module for computing,

upon detection by said comparator of the matching bid and order to sell, positions of the traders who made the matching bid and offer to sell and further computing stops associated with the computed positions, said position determination module being operatively connected to said queue maintenance module for updating said queue of stop bids and said queue of stop offers to incorporate the computed stops.

70. The server computer defined in claim 67, further comprising a communications or posting module operatively connected to said queue maintenance unit for broadcasting said queue of bids, said queue of offers, said queue of stop bids, and said queue of stop offers over the computer network to computers of participating traders.

71. A server computer connected to a computer network for implementing an on-line commodities trading system, comprising:

a queue maintenance unit for maintaining a queue of bids, a queue of offers, a queue of stop bids, and a queue of stop offers;

a comparator operatively connected to said queue maintenance unit for determining whether a match between a bid and an offer has occurred;

an order execution module operatively coupled to said comparator and said queue maintenance unit in part for modifying at least one of said queue of bids and said queue of offers upon a determination by said comparator that a match has occurred; and

a communications or posting module operatively connected to said queue maintenance unit for broadcasting said queue of bids, said queue of offers, said queue of stop bids, and said queue of stop offers over the computer network to computers of participating traders.

72. The server computer defined in claim 71, further comprising a position determination module operatively connected to said order execution module for computing, upon detection by said comparator of the matching bid and order to sell, positions of the traders who made the matching bid and offer to sell and further computing stops associated with the computed positions, said position determination module being operatively connected to said queue maintenance module for updating said queue of stop bids and said queue of stop offers to incorporate the computed stops.

73. A server computer connected to a computer network for implementing an on-line commodities trading system, comprising:

a queue maintenance unit for maintaining a queue of bids, a queue of offers, a queue of stop bids, and a queue of stop offers;

a comparator operatively connected to said queue maintenance unit for determining whether a match between a bid and an offer has occurred;

an order execution module operatively coupled to said comparator and said queue maintenance unit in part for modifying at least one of said queue of bids and said queue of offers upon a determination by said comparator that a match has occurred; and

a position determination module operatively connected to said order execution module for computing, upon detection by said comparator of the matching bid and order to sell, positions of the traders who made the matching bid and offer to sell and further computing stops associated with the computed positions, said position determination module being operatively connected to said queue maintenance module for updating said queue of stop bids and said queue of stop offers to incorporate the computed stops.